

REMARKS

Applicants have amended claims 1, 14, 19, 21-23, 26, 29, 31-34, 37, 39, 40, and 51, and have cancelled claims 24, 25, and 70 without prejudice. Applicants also have added new claims 73 and 74.

Claims 1-3, 5, 6, 8-14, 16, 19, 21-23, 26, 29-34, 36-40, 51-54, 68, and 71-74, of which claims 1, 14, and 19 are independent in form, are presented for examination. Applicants address the Examiner's rejections in turn below.

Claim Rejections – 35 U.S.C. § 112

The Examiner has rejected claim 51 as indefinite under 35 U.S.C. § 112, second paragraph, and has noted that the claims should be amended to recite “the second flux is elongated”. Applicants have amended claim 51 accordingly, and request that the Examiner's rejection of claim 51 be withdrawn.

Claim Rejections – 35 U.S.C. § 102

The Examiner has rejected claims 1, 2, 5, 6, 8-11, 51, and 52 under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,284,400 (Adey). Amended claim 1 recites a battery comprising a housing and a cathode in the housing, the housing having a surface adjacent to the cathode, the surface of the housing defining a plurality of openings arranged to provide gas to a surface of the cathode, which gas, upon first contacting the surface of the cathode, forms first fluxes of gas that overlap on the surface of the cathode to form a generally non-circular second flux of gas on the surface of the cathode.

Adey does not describe or suggest the battery recited in claim 1. Rather, the cathode can openings in Adey provide circular fluxes of oxygen that do not overlap with each other on the surface of the cathode. This is demonstrated with reference to Figure 2 of Adey, shown below:

Adey does not teach that the plumes of oxygen overlap on the surface of the cathode. In fact, Adey teaches away from overlapping the plumes. For example, Adey notes that Figure 2 shows a particularly efficient plume arrangement: "[T]he diffusion is believed to be most efficient within the imaginary circular outlines of plumes 58 as projected from the respective ports 34." (Adey, col. 8, lines 1-3.)

Thus, Applicants request that the Examiner's rejection of claims 1, 2, 5, 6, 8-11, 51, and 52 be withdrawn.

Claim Rejections – 35 U.S.C. § 103

The Examiner has rejected claims 3, 12-14, 16, 19, 21-26, 29-34, 36-40, 53, 54, 68, and 70-72 under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,284,400 (Adey), as evidenced by Linden, Handbook of Batteries.

Claims 3, 12, 13, and 68 depend from claim 1. As explained above, Adey does not describe or suggest all of the features of the battery recited in claim 1. As a result, Adey does not describe or suggest the batteries of claims 3, 12, 13, and 68. Applicants therefore request that the Examiner's rejection of claims 3, 12, 13, and 68 be withdrawn.

Amended claim 14 recites a battery comprising a housing with a surface defining an opening having an aspect ratio between about 15:1 and about 400:1. As the Examiner has noted, "Adey does not explicitly teach the claimed aspect ratio[]." (January 21, 2004 Office Action, page 6.) However, the Examiner has stated that, "Adey teaches an elliptical/oval shape, which . . . would inherently have an aspect ratio of greater than 1." (January 21, 2004 Office Action, page 6.) But the teaching of an elliptical or oval shape does not equate to the teaching of an aspect ratio that, at a minimum, is as high as 15:1. Applicants request that the Examiner's rejection of claims 14, 16, 53, and 70-72 be withdrawn.

Amended claim 19 recites a battery including a housing and a cathode in the housing, the housing having a surface adjacent to the cathode, the surface defining an elongated curved slot having a dimension of from 0.60mm to about 20.00mm. Support for amended claim 19 can be found, for example, in Applicants' statement that, "Generally, the length of slots 80 vary from

about 0.05mm to about 20.00mm . . . and more preferably about 0.60mm to about 1.20mm.”

(Application, page 10, lines 21-23.) Support for amended claim 19 can also be found, for example, in Applicants' depiction of curved slots 110 in Figure 11, and corresponding statement that, “Curved slots 110 can be configured similarly to slots 80.” (Application, page 1, lines 3-4.)

Adey does not describe or suggest a battery housing with a surface defining an elongated curved slot having a dimension of from 0.60mm to about 20.00mm. Rather, Adey states that, “In general, ports in the cathode cans, and corresponding cells, of the invention range in size from anything greater than zero up to about 0.017 inch (0.43 millimeter).” (Adey, col. 14, lines 14-16.) Furthermore, Adey explains that:

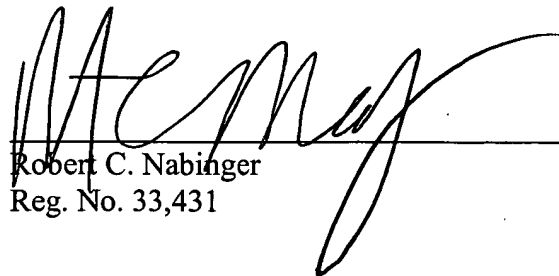
“The advantages of the invention become more apparent as the diameter of the port, or ports, is reduced. Accordingly, it is desired that the area of any given port correspond to a diameter of less than 0.010 inch (0.25 millimeter) . . . and most preferably as little as 0.003 inch (0.08 millimeter), or less.” (Adey, col. 3, line 65 — col. 4, line 5.)

Thus, Adey does not describe or suggest the battery of claims 19, 21-26, 29-34, 36-40, or 54, and Applicants accordingly request that the rejection of these claims be withdrawn.

Applicants believe that the claims are in condition for allowance, which action is requested.

Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,



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